

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A dental implant assembly for counteracting stress in a portion of the dental implant assembly, the assembly comprising:

a dental implant provided with comprising an upper portion with an internal socket formed on a top surface of the upper portion, the internal socket comprising a first portion and a second portion spaced along a longitudinal axis of the dental implant, the first portion disposed adjacent the top surface of the dental implant and defining first lateral surfaces, the second portion spaced further from the top surface and defining a lateral guide surface; and

a turning instrument which is configured to engage the internal socket and to turn the dental implant, wherein the turning instrument has first comprising a drive part and a guide pin part, the drive part comprising second lateral surfaces that can cooperate with corresponding second the first lateral surfaces in the internal socket, the guide pin part extending longitudinally beyond the drive part of the turning instrument such that the guide pin part is configured to be received within the second portion of the socket of the dental implant with the guide pin part corresponding to the lateral guide surface of the socket;

wherein at least one of the first and second lateral surfaces comprises a friction-enhancing coating comprising at least one of titanium nitride and chromium carbide and wherein one or more of the first or second surfaces are provided with means for enhancing friction between the turning instrument and the internal socket; or

wherein the dental implant and the turning instrument comprise interacting parts which extend inside the dental implant and beyond the first and second lateral surfaces, the interacting parts being configured to take up bending moments between the dental implant and the turning instrument.

2. (Canceled)

3. (Currently Amended) The dental implant assembly as in claim 1, wherein a cross-section through the first and second lateral surfaces have non-round geometries of the respective ones of the dental implant and the turning tool is non-round.

4. (Currently Amended) The dental implant assembly as in claim 1, wherein the means for enhancing friction between the turning instrument and the internal socket comprises a friction-enhancing coating is disposed on the first lateral surfaces.

5. (Currently Amended) The dental implant assembly as in claim 1, wherein the means for enhancing friction between the turning instrument and the internal socket comprises a friction-enhancing coating is disposed on the second lateral surfaces.

6. (Currently Amended) The dental implant assembly as in claim 1, wherein the means for enhancing friction between the turning instrument and the internal socket comprises a chosen degree of roughness on the first and second lateral surfaces are formed to include a surface roughness for further enhancing friction between the turning instrument and the internal socket of the dental implant.

7. (Previously Presented) The dental implant assembly as in claim 1, wherein interaction between the first and second lateral surfaces is configured to take place only when a degree of loading or degree of turning of the dental implant and the turning instrument tool is reached.

8. (Canceled)

9. (Canceled)

10. (Currently Amended) The dental implant assembly as in claim 1, wherein the means for enhancing friction between the turning instrument and the internal socket friction-enhancing coating further comprises diamond particles applied to the lateral surfaces.

11. (Canceled)

12. (Currently Amended) The dental implant assembly as in claim 1, wherein the part of the tool extending beyond the first surfaces guide pin part is about 3 to 5 times longitudinally longer than the longitudinal length of the first lateral surfaces of the first portion of the internal socket of the dental implant.

13. (Currently Amended) The dental implant assembly as in claim 1, wherein that the part of the tool extending beyond the first surfaces has the guide pin part comprises first and second longitudinally extending parts with different diameters, the first longitudinally extending part situated next to the first lateral surfaces having a greater diameter than the second longitudinally extending parts and the second portion of the socket comprises medial and distal

sections configured to receive the respective ones of the first and second parts of the guide pin part of the turning tool, the first part having a first diameter and the second part having a second diameter.

14. (Currently Amended) The dental implant assembly as in claim 13, wherein a bending moment which occurs in the event of skewing between the dental implant and the turning instrument tool places a load on surface areas of the second portion of the dental implant which are located at the first longitudinal extending part's area nearest to the first lateral surfaces, and the outermost part of the second longitudinally extending part, which bending moment is prevented from acting on the first portion of the internal socket with the internal socket by a slight clearance that is initially present between the first and second lateral surfaces.

15. (Previously Presented) The dental implant assembly as in claim 14, wherein threads parts of the implant which bear said threads take up said bending moments.

16. (New) The dental implant assembly as in claim 13, wherein the first diameter is greater than the second diameter.

17. (New) A dental implant assembly for counteracting stress in a portion of the dental implant assembly, the assembly comprising:

a dental implant comprising a flange and an internal socket, the flange being disposed at an upper part of the dental implant, the internal socket having first, second, and third portions being spaced along a longitudinal axis of the dental implant, the first portion of the socket being disposed at the upper part of the dental implant and defining a first mating section, the second and third portions of the socket defining interacting surfaces; and

a turning instrument being configured to engage the internal socket and to turn the dental implant, the turning instrument comprising a drive part and a guide pin part, the drive part having a second mating section that can cooperate with the first mating section of the internal socket for transmitting torque from the turning instrument to the dental implant, the guide pin part comprising first and second longitudinally extending parts, the first and second longitudinally extending parts being configured with the first longitudinally extending part being interposed between the drive part and the second longitudinally extending part such that the first longitudinally extending part corresponds

to the interacting surface of the second portion of the socket and the second longitudinally extending part corresponds to the interacting surface of the third portion of the socket, the guide pin part being configured to take up bending moments between the dental implant and the turning instrument for reducing stresses placed on the flange and internal socket of the dental implant;

wherein at least one of the first and second mating sections comprises a friction-enhancing coating comprising titanium nitride for enhancing friction between the turning instrument and the internal socket, the friction-enhancing coating facilitating the reduction of stress in the implant portion upon exertion of torque by the turning instrument against the internal socket.

18. (New) The dental implant assembly as in claim 18, wherein the first mating section is configured such that when the turning instrument is completely inserted into the socket of the dental implant, a bending force is not transferred through the second mating section from the first mating section upon exertion of a bending force on the turning instrument.

19. (New) The dental implant assembly as in claim 19, wherein a load is only transferred to the first mating section from the second mating section upon rotation of the turning instrument.

20. (New) The dental implant assembly as in claim 18, wherein the friction-enhancing coating further comprises diamond particles.